

Application No. 10/776,968
Amendment dated December 15, 2005
Reply to Office Action of September 21, 2005
Express Mail No. EV 760671047 US

Remarks:

Claims 1-22 were previously pending. The Examiner allowed claims 8-22, rejected claims 1-4, 6 and 7, and objected to claim 5. Applicant has amended claim 5 to be independent and added new independent claim 23. Claims 1-23 are currently pending, with claims 1, 5, 8, 13, 18, and 23 being independent.

In the last Office Action, the Examiner indicated that claims 8-22 were allowable and that claim 5 was objected to but would be allowable if rewritten in independent form to include the limitations of the base claim. Applicant appreciates the Examiner's allowance of claims 8-22, and per the Examiner's suggestion, Applicant has amended claim 5 to be independent form and include the limitations of independent claim 1.

The Examiner rejected claims 1-4 and 6-7 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,256,324 to Stefansson. In particular, the Examiner argued that Stefansson discloses a drive pawl (63) and a piezoelectric element (187) adapted to convert electrical energy into kinetic energy. Applicant respectfully submits that the Examiner is incorrect, in that the piezoelectric element of Stefansson is only operable to convert mechanical or kinetic energy into electrical energy.

Stefansson discloses a pawl (63) operable to engage a ratchet wheel (61). (Col. 6, ll. 16-20). A detent spring (94) is also operable to engage the ratchet wheel (61). (See Fig. 1). The detent spring (94) is retained between a pair of mounting members (48) and (186), and the mounting member (186) retains a transducing element (187), which is preferably a piezoelectric element. (Col. 6, ll. 31-56). Upon release of the pawl from the ratchet wheel, the wheel is allowed to move in a forward direction. As the wheel moves in the forward direction, the detent spring "clicks" against respective teeth (182) of the wheel. Each click of the spring against a respective tooth results in an electrical signal translated by the piezoelectric transducer (187) to an electrical lead (188) for receipt of the electrical signal by a pulse shaper (197). (Col. 6, ll. 37-41; col. 11, ll. 65-66).

Application No. 10/776,968
Amendment dated December 15, 2005
Reply to Office Action of September 21, 2005
Express Mail No. EV 760671047 US

As stated throughout Stefansson, the piezoelectric element converts the mechanical energy of the detent spring striking a respective tooth of the wheel to an electrical signal or pulse. (See col. 6, ll. 39-40; col. 8, ll. 18-20 and ll. 24-26; col. 11, ll. 60-64; col. 16, ll. 19-23). Therefore, it is clear that the structure taught by Stefansson does not convert electrical energy or signals into mechanical or kinetic energy, as does the present invention and as currently claimed in independent claims 1 and 23.

Applicant has also added independent claim 23 that includes structure not taught or suggested by Stefansson. In particular, Stefansson does not teach or suggest a mass associated with the drive pawl, such that movement of the mass translates into movement of the drive pawl so as to engage one or more of the teeth of a ratchet wheel or other similarly toothed structure. Further, the piezoelectric element of Stefansson does to receive a voltage so as to accelerate the element to contact the mass and otherwise drive the pawl. Therefore, Applicant respectfully submits that Stefansson does not teach or suggest the claimed structure of independent claim 23.

The remaining claims depend, directly or indirectly, from the discussed independent claims and therefore, should be in a condition for allowance.

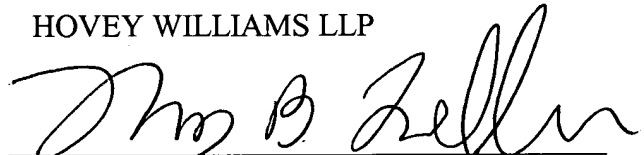
Application No. 10/776,968
Amendment dated December 15, 2005
Reply to Office Action of September 21, 2005
Express Mail No. EV 760671047 US

In view of this response and the remarks herein, Applicants respectfully submit that claims 1-23 are in allowable condition and requests a corresponding Notice of Allowance. In the event of further questions, the Examiner is urged to call the undersigned. Any additional fee which might be due in connection with this application should be applied against our Deposit Account No. 19-0522.

Respectfully submitted,

HOVEY WILLIAMS LLP

BY:

A handwritten signature in dark ink, appearing to read 'Tom B. Luebbering', is written over a horizontal line.

Thomas B. Luebbering, Reg. No. 37,874
2405 Grand Blvd., Suite 400
Kansas City, Missouri 64108
(816) 474-9050

ATTORNEYS FOR APPLICANT

(Docket No. 34263)